

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF APS (ACCESSIBLE PEDESTRIAN SIGNALS)/CPS (COUNTDOWN PEDESTRIAN SIGNALS) AND VIDEO DETECTION CAMERAS AT THE INTERSECTION OF MD 355 (FREDERICK ROAD) AND RIDGEMONT AVENUE/MONTGOMERY COUNTY RECYCLING CENTER IN MONTGOMERY COUNTY, MARYLAND. MD 355 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

RECYCLING CENTER AND MD 355 (FREDERICK ROAD) - EAST LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS RECYCLING CENTER AT FREDERICK, WAIT." *

WALK: RAPID TICK

MD 355 (FREDERICK ROAD) AND RECYCLING CENTER - SOUTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS FREDERICK AT RECYCLING CENTER, WAIT." *

WALK: RAPID TICK

MD 355 (FREDERICK ROAD) AND RIDGEMONT AVENUE - SOUTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS FREDERICK AT RIDGEMONT, WAIT." *

WALK: RAPID TICK

RIDGEMONT AVENUE AND MD 355 (FREDERICK ROAD) - WEST LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS RIDGEMONT AT FREDERICK, WAIT." *

WALK: RAPID TICK

* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPENDICULAR CROSSING IS < 10'

** MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CONTROLLER WILL BE RETROFITTED TO OPERATE VIDEO DETECTION EQUIPMENT (1-8 CAMERAS) AND APS EQUIPMENT.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-8 CAMERAS
9571	6 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
	2 EACH	R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS FREDERICK ROAD"
	2 EACH	R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS RIDGEMONT AVENUE"
	2 EACH	R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS RECYCLING CENTER"

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

NONE

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)

STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.04-07 (CENTER LANE CLOSURE)

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODES	QUANTITY	DESCRIPTION
100000	1 EACH	MAINTENANCE OF TRAFFIC
203030	6 C.Y.	TEST PIT EXCAVATION
585621	550 L.F.	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	180 L.F.	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
800000	6 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
800000	6 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
800000	1 EACH	REMOVE & DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
800000	1 EACH	2-WIRE CENTRAL CONTROL UNIT
800000	2 EACH	CONDUIT BEND IN EXISTING FOUNDATION BASE (ANY SIZE)
800000	6 EACH	VIDEO DETECTION CAMERA AND CONTROL CABLE (ANY LENGTH)
801004	6 C.Y.	CONCRETE FOR SIGNAL FOUNDATION.
802501	570 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805125	70 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	40 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805155	300 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
811001	4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	6 S.F.	INSTALL GROUND MOUNTED SIGN
818004	6 EACH	10 FOOT BREAKAWAY PEDESTAL POLE
837001	5 EACH	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
861105	1000 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	970 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. ANYESHA MOOKHERJEE
ASSISTANT DISTRICT ENGINEER -
TRAFFIC (MONTGOMERY)
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MR. TOM FOUNTAIN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
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MR. VICTOR CRAFTON
ASSISTANT UTILITY ENGINEER
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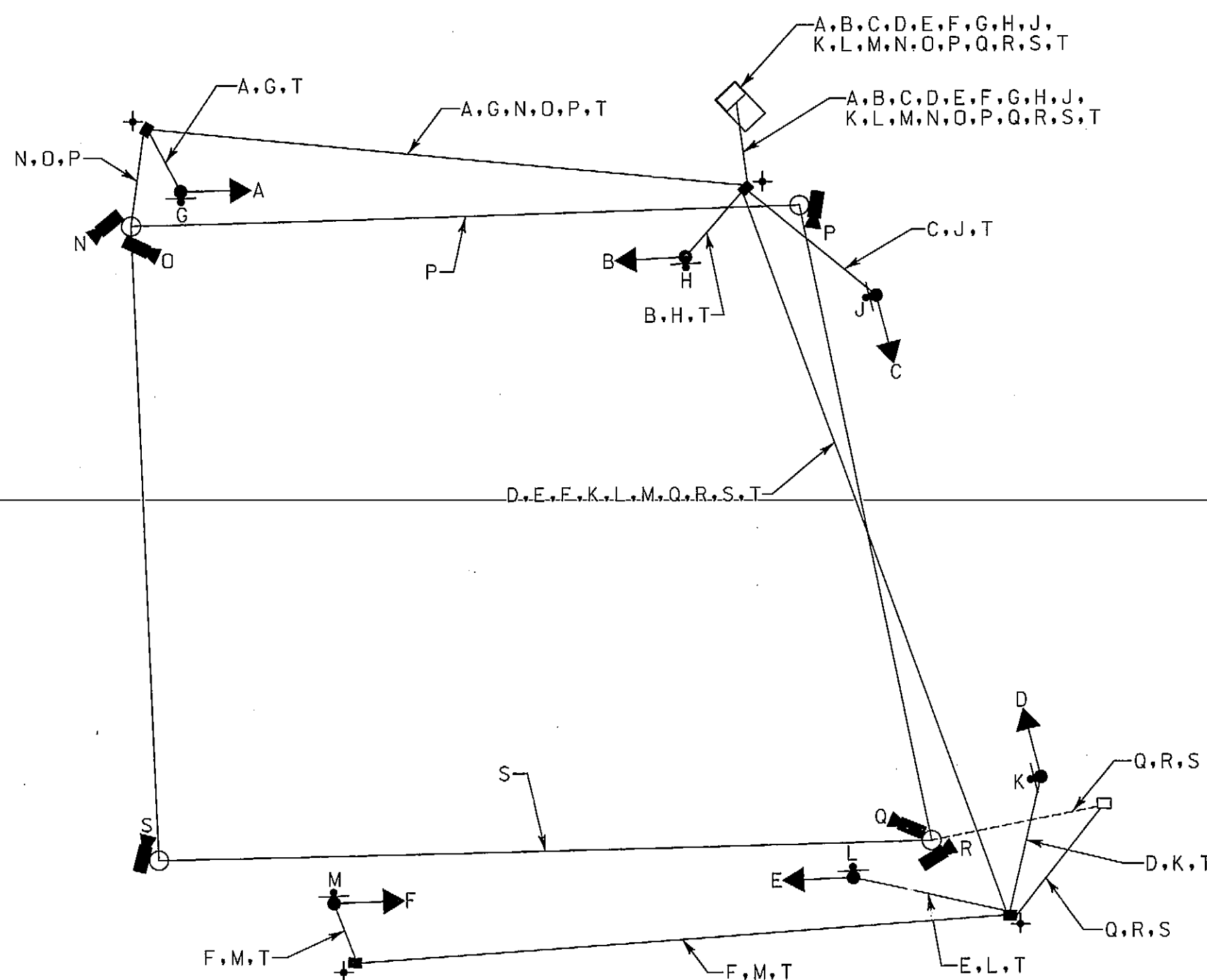
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MR. MICHAEL A. STOCKER
DOTS/SIGNAL WHAREHOUSE
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DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS
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MR. BOB RICKETTS
MONTGOMERY COUNTY TECHNICAL CENTER SUPERVISOR
PHONE: (240) 876-3681

WIRING DIAGRAM



WIRING KEY

A B C D E F G H J K L M } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

G K H L J M } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

N O P Q R S } VIDEO CAMERA DETECTION LEAD-IN CABLE

T } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

+ - 3/4 IN. X 10 FT. GROUND ROD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6															
PHASE 1 + 6	G	G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 6 CHANGE	PHASE 2 + 5	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 5	2 + 5 CHANGE	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	PED CLEARANCE	G	G	G	G	G	G	R	R	R	FLDW	FLDW	DW	DW	FLDW	FLDW
2 + 6 CHANGE	2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT	PED CLEARANCE	R	R	R	R	R	R	G	G	G	DW	DW	WK	WK	DW	DW
4 + 8 ALT CHANGE	FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	DARK	DARK	DARK	DARK	DARK	DARK

WR&A

WHITMAN, REQUARDT
& ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 355 (N. FREDERICK ROAD)
AND RIDGEMONT AVENUE/MONTGOMERY CENTER
(GAITHERSBURG, MARYLAND)

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	JANUARY 2013	CONTRACT NO.	MO1315377
DESIGNED BY	J. RASMUSSEN	COUNTY	MONTGOMERY		
DRAWN BY	J. RASMUSSEN	LOGMILE	15035512.23		
CHECKED BY	N. LEARY	TIMS NO.	L796		
F.A.P. NO.		TOD NO.			
TS NO.	4084B	DRAWING	TSP-3	OF 3	SHEET NO. 3 OF 3